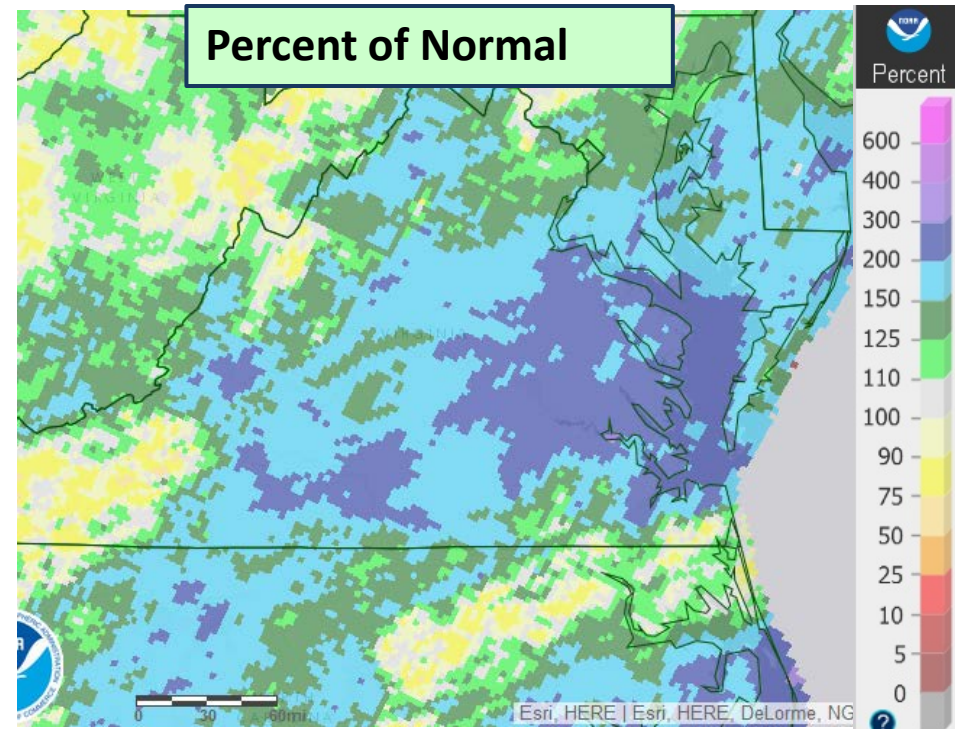
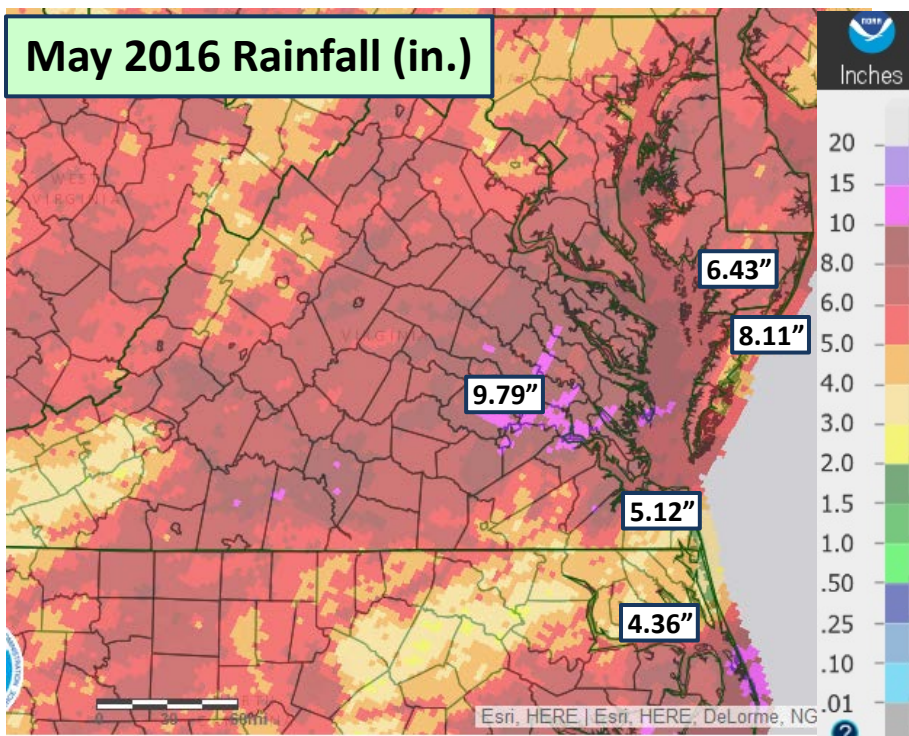


May 2016: Wet and Cool

Numerous rainfall events brought much above normal precipitation to most of the Wakefield forecast area. Richmond at 9.79 inches experienced their wettest May on record. Northeast North Carolina and a narrow strip of extreme southern Virginia east of Interstate 95 had near normal rainfall. Rainfall was well distributed and while putting plenty of moisture in the ground, no significant flooding was reported.

A wide swath from the Piedmont to the Chesapeake Bay north of a line from Emporia to the Peninsula had from 7 to 10 inches. Some amounts in the Williamsburg area and some spots north of Richmond had over 10 inches. A CoCoRaHS station in Westmoreland County had 11.42 inches and a COOP observer in Ashland measured 11.13. Amounts on the Lower Eastern Shore were also well above normal ranging from five to eight inches. The part of southeast Virginia south of a line from Emporia to Hampton also had 5 to 8 inches with the far southeast including Southside Hampton Roads and the Northeast North Carolina counties averaging from 3 to 6 inches.

It is interesting to note that despite the abundant rainfall in May, due to the dry start to meteorological spring in March and early April, precipitation from March through May was only slightly above normal at the climate sites. Richmond was 1.89 above normal, Norfolk 0.86 on the plus side Salisbury 0.29, Wallops Island 1.64 and Elizabeth a touch (0.11) below normal.



Summary Tables for Climate Sites

Richmond, VA May 2016 Summary Data										
RIC	TEMPERATURE				PRECIPITATION				Significance / Remarks	
	ACTUAL			Dep	Total (in)		# Days		Temperature	Precipitation
	Max	Min	Avg		Actual	Dep	.01"+	Dep		
May	72.6	54.9	63.8	-2.6	9.79	6.01	16	5		#1 wettest
Norfolk, VA May 2016 Summary Data										
ORF	TEMPERATURE				PRECIPITATION				Significance / Remarks	
	ACTUAL			Dep	Total (in)		# Days		Temperature	Precipitation
	Max	Min	Avg		Actual	Dep	.01"+	Dep		
May	73.6	58.4	66.0	-0.6	5.12	1.71	17	6		
Salisbury, MD May 2016 Summary Data										
SBY	TEMPERATURE				PRECIPITATION				Significance / Remarks	
	ACTUAL			Dep	Total (in)		# Days		Temperature	Precipitation
	Max	Min	Avg		Actual	Dep	.01"+	Dep		
May	70.5	52.5	61.5	-1.1	6.43	2.81	19	8		#8 wettest

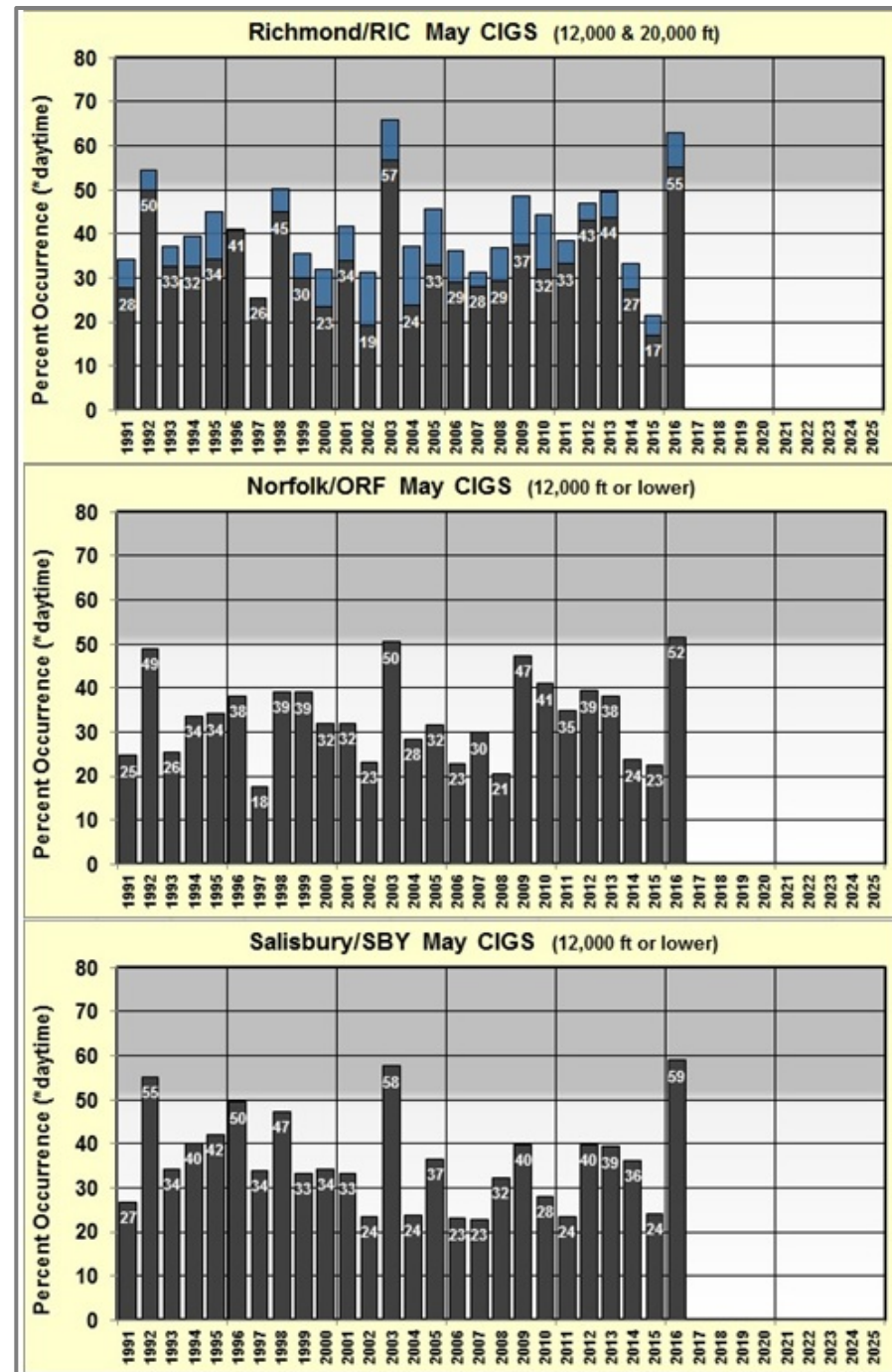
Richmond May Precipitation Facts:

- The monthly precipitation total for the month was 9.79", making 2016 the wettest on record. This is more than 6" above the normal (3.78"). The wettest May prior to this year had been 9.13" in 1889.
- There were 16 days with measureable precipitation (0.01" or more). The normal value is 11 days. Several Mays have had more wet days than this year, the most being 23 days in 2003.
- However, May 2016 recorded 11 days with at least 0.25" of rain and this is a new record (10 days had been the most back in 1946). Nine days received at least 0.50", also a new record for the month, breaking the old record of 7 days in 1972.

Cloud Cover:

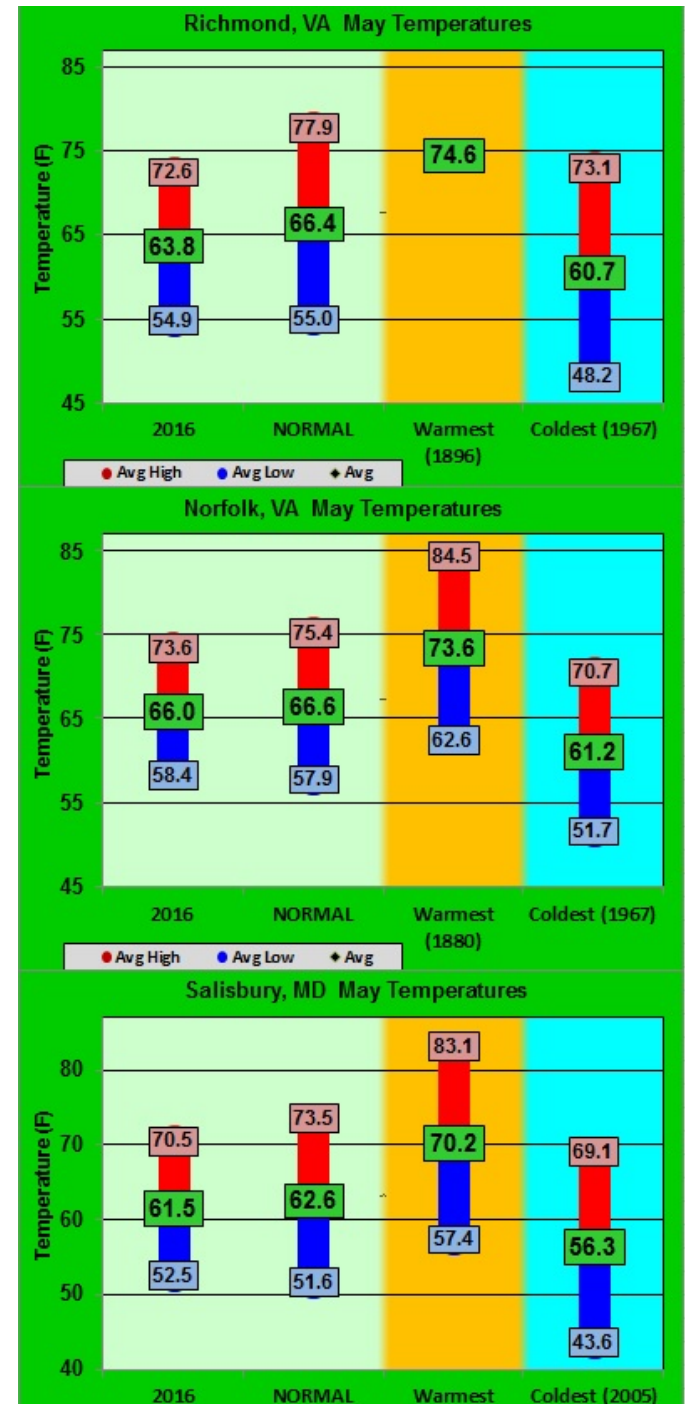
Data for cloud cover has been compiled from the hourly observations starting in 1991 at Richmond (RIC), Norfolk (ORF), and Salisbury (SBY) and queried for the daytime hours which in May roughly equates to 7 am through 8 pm. The graphs depict the percent time where the hourly observation reported either broken or overcast sky conditions. The term “broken” denotes the sky being covered by 5/8, 6/8, or 7/8ths cloud coverage while overcast represents complete cloud coverage (8/8ths). At Richmond, two sets of cloud level thresholds were available for use, while Norfolk and Salisbury only have the 12,000 ft. or lower threshold. For comparative purposes among the three sites, we will use the 12,000 ft. threshold.

As you can see, May 2016 was either the cloudiest since 1991 (as in the case of Norfolk and Salisbury) or the 2nd cloudiest as in the case at Richmond. All three sites had the sky broken or overcast more than half of the time, 55% at Richmond, 52% at Norfolk, and 59% at Salisbury. On average for the 1991-2016 timeframe, Richmond and Norfolk have broken or overcast conditions 34% of the time, and 36% at Salisbury.



Temperature

Overall, temperatures were below normal for the month, although due to a warm final week of the month, none of the climate sites ended up placing in the top ten list for coldest Mays on record. The departure from normal was greater at Richmond than at Salisbury and Norfolk. The graphs compare the values for 2016 to the 1981-2010 normal and also show the warmest and coldest on record. The following page has some Richmond-specific temperature data as that was the most noteworthy.

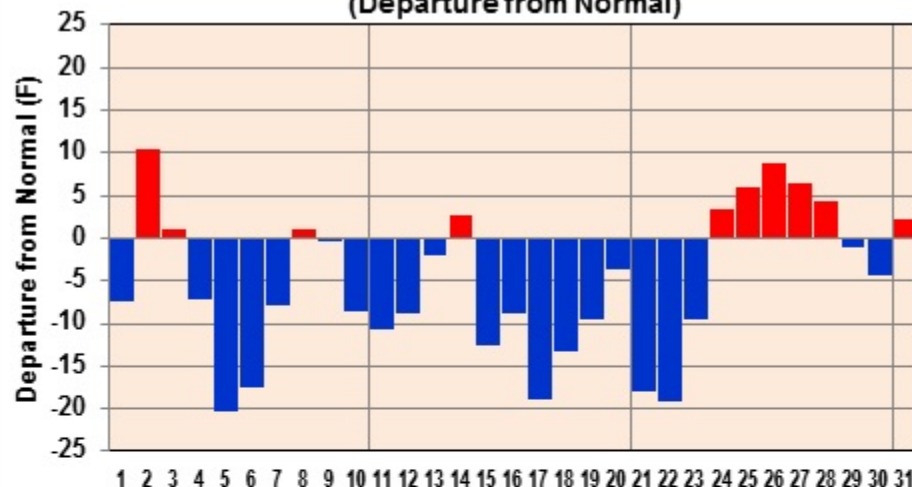


Warmer Finish to a cool, wet May

Richmond May Temperature Facts:

- The average temperature for the month was 63.8 F or **2.6 F below normal**. This did not make the top 10 list of coldest Mays on record (the 10th coldest is 63.0 F in 1954 and the coldest on record was 60.6 F in 1967).
- The average daily high for the month was 72.6 F or **5.3 F below normal**. In terms of this, May 2016 was the 5th coolest on record (only 2003, 1921, 1920, and 1917 were cooler).
- The average daily low temperature for the month of 54.9 F was actually quite close to normal.
- As noted above, most of the month of May 2016 was very cool regarding high temperature, with just 8 of the first 23 days at Richmond recording a high of 70 F or warmer. The month ended with a relative warm spell, but still finished with only 16 days with a high of 70 F+, tying 1920 with the fewest such days. On average, May has 25 of 31 days with a high of 70 F or higher.
- The graphs to the right depict departure from normal values at RIC for each day of the month for high and low temperature. Take note in the top graph the large number of days where highs were several degrees below normal.

Richmond Daily High Temperature May 2016
(Departure from Normal)



Richmond Daily Low Temperature May 2016
(Departure from Normal)

